

A NEW *XYELA* (HYMENOPTERA: XYELIDAE) FROM WESTERN UNITED STATES¹

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ABSTRACT: *Xyela lata*, n. sp., is described from Colorado, Nevada, and Oregon. Adults were collected from *Pinus flexilis* and *Pinus monophylla*.

Larvae of *Xyela* feed on the developing pollen of the male strobili of pines. Species of the genus probably occur wherever pines are found. Adults are small and short-lived and may be found on the larval host plant or on nearby pollen sources such as the catkins of willow, alder, or birch. Because of their small size and habits, there are undoubtedly a number of species yet to be discovered. One unusual new species has recently come to my attention and is described here.

Burdick's (1961) revision of *Xyela* included 15 species in the North American fauna and notes on the biology of some. Since then, two species have been added (Smith, 1979). Smith (1978) listed 32 world species.

Xyela lata Smith, new species

Figs. 1-4

Female. — Body length, 2.6-3.3 mm; sheath length, 2.1-2.3 mm; forewing length 4.0-4.3 mm. Antenna yellowish with 1st segment, inner surface of 3rd segment, and apical filament usually more brownish. Background color of head yellow with interocellar area, postocellar area, spot between postocellar area and eye, lines from anterior ocellus to each antennal socket, line extending from anterior ocellus to interantennal area, clypeal suture, and apical margin of clypeus black to dark brownish. Background color of thorax yellow with blackish to dark brown on mesosternum, cervical sclerites, and most of dorsum; usually yellowish spots on mesonotal lateral lobes and anterior portion of mesoscutellum. Abdomen blackish with narrow apical margins of segments yellow; ventrally and laterally dark brownish to partly or mostly yellowish. Legs with coxae, trochanters and most of femora dark brownish; extreme apices of femora, tibiae and tarsi yellowish. Wings hyaline; veins and stigma amber. Third segment of maxillary palpus longer than 1st antennal segment (as 1.3:0.7) and as broad or slightly broader than 3rd antennal segment. Sheath broad, laterally flattened, with lateral, longitudinal ridge; in lateral view narrow at extreme base but immediately broadening, ventral margin straight, apex with dorsal margin curving downward to rounded apex near ventral margin (Figs. 1, 2). Lance and lancet without teeth; apex of lancet with apico-ventral notch, extreme apex narrowed and pointed at apex, with about 7 distinct annuli (Figs. 3, 4).

Male. — Unknown.

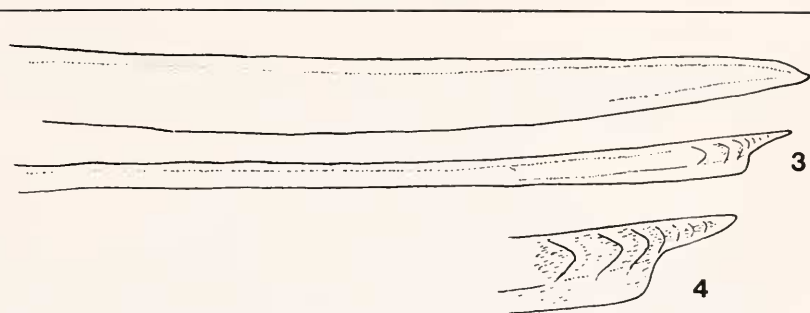
Holotype. — Female, Nederland, Boulder Col., Colorado, labeled "Nederland, Colo., Science Lodge, 9500', 27-VI-61, W.R.M. Mason, *Pinus flexilis*." In the Canadian National

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Figs. 1, 2. *Xyela lata*. 1, Lateral view. 2, Apex of abdomen and sheath.



Figs. 3, 4. *Xyela lata*. 3, Lance and lancet. 4, Apex of lancet.

Collection, Ottawa.

Paratypes. — COLORADO: Same data as holotype (1 ♀); same data as holotype except date, 29-VI-61 (one without host data) (2 ♀); Nederland, 8500', 18-VI-61, W.R.M. Mason (1 ♀); Estes Park, 7500', 19-VI-61, B.H. Poole (1 ♀). NEVADA: Mt. Springs summit, Clark Co., V-26-1961, elev. 5400', *Pinus monophylla*, R.C. Bechtel (1 ♀). OREGON: Mt. Washington [Linn Co.], July 13, 1963 (1 ♀). In the Canadian National Collection and National Museum of Natural History, Washington, D.C.

Hosts. — Adults were collected from *Pinus flexilis* James and *P. monophylla* Torr. & Frém. Hosts may include several species of pine, as is the case for some other *Xyela* species.

DISCUSSION

In Burdick's (1961) key, this species runs to *bakeri* Konow, but *bakeri* is commonly mostly black, the lancet has no apical notch or distinct annuli, and the sawsheath is less than 2 mm long. The extremely broad, straight, laterally flattened sheath and the constricted apex of the lancet are unique to *X. lata* and are not known in any other *Xyela*. These unusual characteristics will immediately distinguish this new species.

Some variation occurs in the amount of yellow, especially on the dorsum of the thorax and venter of the abdomen. The mesonotum may be almost all black to dark brown, or the yellow spots on the lateral lobes and scutellum may be extensive; the abdomen may be mostly black ventrally and laterally, or mostly yellowish.

Collections are from high elevations, as indicated by label data about 5400' or above.

The specific name is from the Latin "*latus*", referring to the unusually broad sawsheath.

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SOCIETY MEETING OF NOVEMBER 29, 1989 NORTH AMERICAN BIRD BLOW FLIES AND MAGGOTS (*PROTOCALLIPHORA*)

Dr. Curtis W. Sabrosky, Speaker

About a quarter of all species of North American perching birds have been found infested with maggots of blow flies. These blood sucking parasites feed on nestling birds, engorging themselves two or three times before pupating in the bottom of the nest or falling to the ground to pupate. Although the iridescent blue-black or coppery-colored adults are rarely seen except when reared, they have a very long life span and probably overwinter in this stage even in the north of Canada and Greenland. Dr. Curtis W. Sabrosky, retired from the USDA Systematic Entomology Laboratory and former president of the Entomological Society of America, described these little known flies at the society meeting at the Academy of Natural Sciences of Philadelphia. He has recently coauthored a book on the taxonomy, biology and ecology of the *Protocalliphora*.

Twenty-six species of bird blow flies are recognized in North America; however, subtle key characters make their identification difficult. While the different species are somewhat stratified vertically in a woodland habitat and have distinctive geographical distributions, there is little host specialization. For example, one species, *P. braueri* (Hendel), has been found in the nests of 42 bird species and nine *Protocalliphora* have been found in robin nests. Once 1200 maggots were found in a single hawk nest. Only ground nesting, shore birds and birds of the lower Mississippi Valley and Gulf Coast seem to be spared from these parasites.

Dr. Sabrosky's lecture was attended by 19 members and 6 guests who came early and stayed late to talk about insects. Perhaps it was the mulled cider or refreshments that put everyone in a good mood. Among a number of topics discussed in the open forum before the featured talk was the preservation of habitats by Jane Ruffin. Cape May, New Jersey has long been recognized as a place where migrating birds and insects pause to feed before continuing their annual southward migration. The rapid development in Cape May County is reducing the cover and resources normally used by migrants such as the monarch butterfly. Mrs. Ruffin urged members to write letters supporting efforts to preserve existing old growth and to create new backyard habitats that will sustain migrant birds and insects in a residential setting.

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